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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/814,386	03/21/2001	Matthew P.J. Baker	GB 000038	3869
24737	7590	06/06/2005	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			ORGAD, EDAN	
			ART UNIT	PAPER NUMBER
			2684	

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/814,386

**Applicant(s)**

BAKER ET AL.

**Examiner**

Edan Orgad

**Art Unit**

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 5-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 5-14 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f):
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed 3/22/04 have been fully considered but they are not persuasive.

Applicant's argues that Naghian fails to disclose in amended claims 1, 3, 9 and 13 the feature of measurements of a time rate of change of received signal to interference ratio. Applicant further argues that this feature is useful in determining a rate of adjustment of the output power. However, it was not examiner's contention to provide evidence in Naghian to teach measurements of a time rate of change of received signal to interference ratio but rather in Kaneda et al (US Patent 6,343,218). Kaneda discloses each that each transmission power control signal bit determines and outputs reliability information (e.g. a frame error rate) for performing weighting which is proportional to the signal power and inverse-proportional to the noise power, based on a reception power (signal power) obtained by averaging the detected transmission power control bits by a predetermined time constant and an average SIR (signal-to-noise power ratio) for the most recent predetermined time period (col. 7, lines 20-27), in other words, based measurements of a time rate of change of received signal to interference ratio averaged over a predetermined period.

### ***Claim Objections***

Claim 7 is objected to because of the following informalities: claim 7 depends on cancelled claim 4. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 5-7 and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naghian (Naghian, World International Property Organization No. WO 00/04649) as applied to claims 1, 3, and 13 above, and further in view of Kaneda et al. (Kaneda, US Patent No. 6,343,218).

Regarding claims 1 and 13, Naghian teaches of a radio communication system and method having a communication channel between a primary station and a secondary station for transmission of information from one of the primary and secondary stations (the transmitting station) to the other station (the receiving station) (Figures 2, 4, and 5), wherein the transmitting station has means for adjusting its output power at a plurality of different rates (Figure 2 and page 5, lines 29 – 35), the receiving station has means for determining, from measurements of characteristics of signals received from the transmitting station, an appropriate rate of adjustment of the output power of the transmitting station and means for communicating said rate of adjustment to the transmitting station (page 5, lines 24 – 28), and the transmitting station has means responsive to communications from the receiving station for setting the adjustment rate of its output power (page 5, lines 24 – 28 and page 8, lines 10 – 21).

However, Naghian fails to specifically disclose the measurements of a time rate of change of received signal to interference ratio over a predetermined period received from the transmitting station.

In a related art dealing with power control systems, Kaneda teaches measurements of a time rate of change of received signal to interference ratio averaged over a predetermined period (column 7, lines 22 –29).

It would have been obvious to one skilled in the art at the time of invention to have included into Naghian's averaging system, Kaneda's SIR average, for the purposes of maintaining a certain level of quality in communication (such as during a handover), as taught by Kaneda.

Regarding claim 3, Naghian teaches of a primary station for use in a radio communication system having a communication channel between the primary station and a secondary station, wherein means are provided for determining, from measurements of characteristics of signals received from the secondary station, an appropriate rate of adjustment of the output power of the secondary station (page 5, lines 24 –28), selected from one of a plurality of rates of adjustment available to the secondary station (Figure 2 and page 5, lines 29 –35), and for communicating said rate of adjustment to the secondary station (page 5, lines 24 –28 and page 8, lines 10 –21).

However, Naghian fails to specifically disclose the measurements of a time rate of change of received signal to interference ratio over a predetermined period received from the transmitting station.

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In a related art dealing with power control systems, Kaneda teaches measurements of a time rate of change of received signal to interference ratio averaged over a predetermined period (column 7, lines 22 –29).

It would have been obvious to one skilled in the art at the time of invention to have included into Naghian's averaging system, Kaneda's SIR average, for the purposes of maintaining a certain level of quality in communication (such as during a handover), as taught by Kaneda.

Regarding claim 5, Naghian further teaches of characterized in that the measured characteristic of signals received from the secondary station is the rate of change of received signal to interference ratio (page 6, lines 10 –34).

Naghian does not specifically teach of averaged over a predetermined period (though it should be noted that Naghian makes reference to rate of change of power control bits over a time period, as the values are a mean value, as noted on page 6, lines 10 –26 and again on page 8, lines 10 – 21 and further the two are correlated, as per page 8, lines 32 –35).

In a related art dealing with power control systems, Kaneda teaches of received signal to interference ratio averaged over a predetermined period (column 7, lines 22 –29).

It would have been obvious to one skilled in the art at the time of invention to have included into Naghian's averaging system, Kaneda's SIR average, for the purposes of maintaining a certain level of quality in communication (such as during a handover), as taught by Kaneda.

Regarding claim 6, Naghian teaches all the claimed limitations as recited in claim 3. Naghian further teaches of characterised in that communication to the secondary station of required changes in its rate of adjustment of output power is made after the measured signal characteristic has passed a threshold for a predetermined period (starting page 8, line 32 and ending page 9, line 2).

Regarding claim 7 (in view of the objection above) Naghian teaches of characterized in that further properties of the received signal are used to verify the rate of change of output power determined from the rate of change of received signal to interference ratio (starting page 8, line 32 and ending page 9, line 2).

Regarding claim 9, Naghian teaches of a secondary station for use in a radio communication system having a communication channel between the secondary station and a primary station (Figures 2, 4, and 5), wherein means are provided for determining, from measurements of characteristics of signals received from the primary station, an appropriate rate of adjustment of the output power of the primary station (Figures 2 and 5 and page 5, lines 29 – 35 and starting page 11, line 30 and ending page 12, line 6), selected from one of a plurality of rates of adjustment available to the primary station, and for communicating said rate of adjustment to the primary station (Figures 2 and 5 and page 5, lines 29 – 35 and starting page 11, line 30 and ending page 12, line 6).

However, Naghian fails to specifically disclose the measurements of a time rate of change of received signal to interference ration over a predetermined period received from the transmitting station.

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In a related art dealing with power control systems, Kaneda teaches measurements of a time rate of change of received signal to interference ratio averaged over a predetermined period (column 7, lines 22 –29).

It would have been obvious to one skilled in the art at the time of invention to have included into Naghian's averaging system, Kaneda's SIR average, for the purposes of maintaining a certain level of quality in communication (such as during a handover), as taught by Kaneda.

Regarding claim 10, Naghian further teaches of characterized in that the measured characteristic of signals received from the primary station is the rate of change of received signal to interference ratio (page 6, lines 10 –34).

Naghian does not specifically teach of averaged over a predetermined period (though it should be noted that Naghian makes reference to rate of change of power control bits over a time period, as the values are a mean value, as noted on page 6, lines 10 –26 and again on page 8, lines 10 – 21 and further the two are correlated, as per page 8, lines 32 –35).

In a related art dealing with power control systems, Kaneda teaches of received signal to interference ratio averaged over a predetermined period (column 7, lines 22 –29).

It would have been obvious to one skilled in the art at the time of invention to have included into Naghian's averaging system, Kaneda's SIR average, for the purposes of maintaining a certain level of quality in communication (such as during a handover), as taught by Kaneda.

Regarding claim 11, Naghian further teaches of characterized in that communication to the primary station of required changes in its rate of adjustment of output power is made after the



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measured signal characteristic has passed a threshold for a predetermined period (starting page 8, line 32 and ending page 9, line 2).

Regarding claim 12, Naghian and Kaneda teach all the claimed limitations as recited in claim 10. Naghian further teaches of characterised in that further properties of the received signal are used to verify the rate of change of output power determined from the rate of change of received signal to interference ratio (starting page 8, line 32 and ending page 9, line 2).

Regarding claim 14, Naghian further teaches of characterized in that the measured characteristic of signals received from the transmitting station is the rate of change of received signal to interference ratio (page 6, lines 10 –34).

Naghian does not specifically teach of averaged over a predetermined period (though it should be noted that Naghian makes reference to rate of change of power control bits over a time period, as the values are a mean value, as noted on page 6, lines 10 –26 and again on page 8, lines 10 – 21 and further the two are correlated, as per page 8, lines 32 –35).

In a related art dealing with power control systems, Kaneda teaches of received signal to interference ratio averaged over a predetermined period (column 7, lines 22 –29).

It would have been obvious to one skilled in the art at the time of invention to have included into Naghian's averaging system, Kaneda's SIR average, for the purposes of maintaining a certain level of quality in communication (such as during a handover), as taught by Kaneda.

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Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naghian (Naghian, World International Property Organization No. WO 00/04649) and further in view of Lokio (Lokio, World International Property Organization No. WO 98/09384).

Regarding claim 8, Naghian teaches all the claimed limitations as recited in claim 3. Naghian does not specifically teach of characterised in that means are provided for determining the speed of the secondary station and for adjusting the determined appropriate rate of adjustment of the output power of the secondary station depending in the speed of the secondary station.

In a related art dealing with power control, Lokio teaches of characterised in that means are provided for determining the speed of the secondary station and for adjusting the determined appropriate rate of adjustment of the output power of the secondary station depending in the speed of the secondary station (page 3, lines 27 –34).

It would have been obvious to one skilled in the art at the time of invention to have included into Naghian's power control system, Lokio's step size changes based on speed of the mobile, for the purposes of compensating for fading present in a mobile environment, as taught by Lokio.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edan Orgad whose telephone number is 571-272-7884. The examiner can normally be reached on 8:00AM to 5:30PM with every other Friday off..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Edan Orgad

  
May 26, 2005

  
**NAY MAUNG**  
SUPERVISORY PATENT EXAMINER